NEW-YORK FARMER,

AND

AMERICAN GARDENER'S MAGAZINE.

"Agriculture at once the cause and evidence of civilization."

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NEW-YORK FARMER.

JULY 30, 1837.

To the Editor of the New-York Farmer.

I have read with much attention and pleasure, the useful information contained in your late No., relative to *poudrette*. In France it is an article of great value, and a source of much profit to the companies vested with the exclusive right (disposed of at auction) of cleaning the privies in large cities.

Some sixty years ago, Paris was in a state of shocking filthiness, and the police by no means as well directed as at present. Fountains furnishing throughout the day, streams of pure and fresh water—sewers of ample dimensions (6 feet deep and 5 feet wide,) emptying into the river; companies appointed to sweep and clean the streets every evening before ten o'clock, and to make a proper disposition of the manure, were not then in existence. The streets were narrow and badly lighted, and that part of Paris, yet called the *City**, would give but an imperfect idea of what the whole metropolis was before the revolution.

M. Boursault, who had been unsuccessful on the stage of one of our minor theatres, was the first man who entertained the idea of regulating and improving the administration of this department of the police. He solicited from the Corporation the use of a piece of ground, where the daily produce of the city might be deposited until converted into good manure, his plan being founded upon free ventilation and action of the sun, required a large space of ground. He was authorised to use the *Petit Pantin* better known as *Mont faucon*, and that place has since been the rendezvous of all manufactories of dangerous and disagreeable nature, horse and dog slaughter-houses, &c.

For several years M. Bousault carried on his business to the general satisfaction, and to the benefit of agriculture. he made an immense fortune which he used nobly. The garden of his Hotel in the faubourg Poissonniere, is one of the first in France, and contains a collection of roses superior to that of the Royal Garden of Plants. Open to all strangers and amateurs it is as well known as the Hotel itself, whose saloons are frequented by the most agreeable society.

M. Boursault is now 70 years of age, and is yet very active and healthy. He still retains his early theatrical predelictions, and is one of the most constant visitors on the stage of the Theatre Francais and at the Opera.

If the Corporation thought it just and fair that he who had been a benefactor to the city should be allowed to enjoy the profit of the business he had so well organized, it was reasonable that this profit should not pass entire to his successors, and since M. Boursault has left the management of the general cleansing of Paris. it is every year given to the highest bidder as you term it, and is not left to adventurers as the Editor of the Farmers' Register states.

But as in society we constantly aim at perfection, the process which has been found so useful for 40 years, has become insufficient, and a positive nuisance. While the Corporation looks for another and more remote location, science has been consulted for a process that would dispense with so many reservoirs, the emanations of which are very disagreeable, if not dangerous, and even injurious to the manure prepared.

Long ago, M. Chaptal endeavored to remedy the mode of evaporation in the sun, but the suggestions of that great chemist were then only pursued in their application to the arts and manufactures, while his ideas on agriculture, though considered good and advantageous, were not so generallly admitted into practice. But the benefits of 20 years peace, and the general improvement have set many minds to work, and Chaptal will be found once more a benefactor of mankind.

You are perfectly correct Mr. Editor, when you say that a French chemist has found in a vegetable matter, the means of drying and pulverising in a few hours, the contents of privies.—The contracts that exist between the Corporation of Paris and the bidders of *the general cleansing* of the city, prevent the immediate application of the process—but as no such obstacle exists in New-York, I think you deserve credit, encouragement and protection, for your efforts to found in your city so desirable an establishment in which I wish you complete success.

* The reader may form some notion of this Parisian five points when it is recollected, that it was built before carriages were in use.

For the New-York Farmer.

MANAGEMENT OF SHEEP.

No. V.

Messrs. Editors,—In my last communication I endeavored to maintain, that in cleansing and putting wool in the best condition for market—*honesty* and *interest went hand in hand.*

The proposition was fully demonstrated so far as my experience has carried me. I shall not now add further proofs, but merely make one or two more suggestions in regard to making use of *vats* for washing of sheep.

I could fill my sheet, if it was necessary, with affidavits of my neighbors maintaining the vast superiority of vats over pools, or in fact, any other mode in use.

There are few streams but that afford a needful supply of water, and also a sufficient fall. Where the latter is *not* the case, it is only necessary to excavate a place near, or on the margin of the brook, sufficiently large for the admission of the vat and platform. A fall of three or four feet is of the greatest consequence, as without it, it is impossible to gain the full advantage to be derived from vats. I mentioned in my last, that it was my practice to have my sheep, first soaked, (as we wool growers call it,) after which, they are removed under the spouts, and the water falling, the above mentioned distance, separates the dirt more effectually, and in a much shorter time than it can possibly be done by *squeezing*. A fact, it is out of the question to get wool white and clean by squeezing, unless a much longer time is taken than usual, and after the greatest pains, its aspect is dingy.

But, believing that those of your readers. who are practical farmers, can readily appreciate the *vat system* without any further efforts of mine, I will only say a word or two as regards expense of construction. I have already stated that the cost of mine, including platforms and all other appendages, was only seven dollars. Now I will recommend, if so small an expense will deter any individual, that some half dozen farmers, or more, *club* and fix on some eligible site, and each contribute his pro rata of expense.

My neighbors, have. for years past, brought thin flocks to my place for washing:—I charge them nothing—they are perfectly welcome—and happy am I, that I am instrumental in putting them in the way of doing the *clean thing*.

In exposing the slovenly practices of our farmers relative to shearing of sheep, and matters connected therewith, want of time will compel me to be brief.

Generally speaking, shearers are too much in haste to get off the fleece; and, hence, as my honest neighbor Ben. Rogers says, "they not only take off wool, but enough of hide with it for moderate sized leather apron." This is wrong—it is cruel:—but arises altogether from haste and carelessness. There are shearers, who will shear from 50 to 80 sheep per day—such however, are rarely found:—in general, no man can shear beyond 30 or 40, and perform his work as it should be.

There is an inhuman practice of shearers, which every wool grower ought to discountenance and correct—if it was not so common I would not allude to it—and that is, of *cuffing* and *kicking* sheep to *make them lay still* when shearing. Those who are acquainted with *my ways* know better than to exercise this foolish and brutal spite thus.

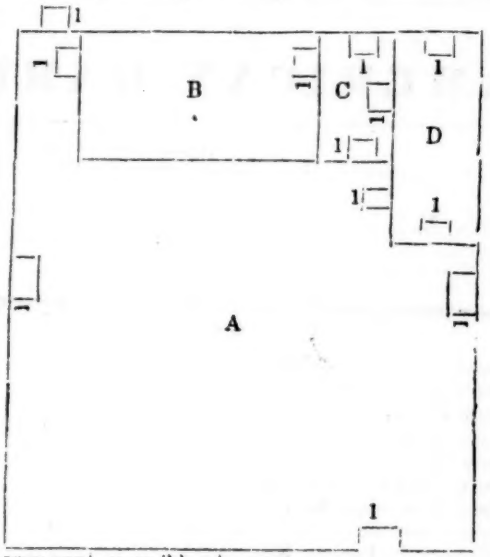
It is almost universally the case in this quarter, that, in putting up a fleece, a band is twisted of wool to bind and secure it. I can inform those who do this, that manufacturers do not approve of it; and, for the reason, that it causes much trouble to the staphos in untwisting and separating the different qualities of wool, of which the band may consist. The best way is to secure the fleece with twine.

Connected with the subject of shearing, pounding or yarding sheep is suggested to my mind.

Nine times in ten, when ready for shearing, a temporary yard is built of rails or poles, for the reception of the flock, which is *always too* small, and of course the poor animals are almost suffocated:—losses have indeed, occurred in this way. But this is not all:—when so many are confined, much filth accumulates, which, readily. finds its way on the floor of the shearer, and *some how* is very apt to go still farther, viz: *inside of the fleece.*

I experienced many of the evils attendant upon pounding sheep, in the usual way for a length of time:—but a number of years since were obviated by the erection of a shearing house, with all the necessary pounds, which are constructed of posts and boards, and of course, firm and durable.

I herewith, Messrs. Editors, present you with the outlines of the whole with the necessary explanations. I do not doubt but there are many whose establishments of the kind are superior—if so, I am glad of it. But to those who are not provided with any, I can recommend my own plan as affording not only great ease and facility in yarding of sheep, but every other convenience desirable.



A Large yard, some 30 rods square.
B Large pound, 50 feet by 15 feet.
C Small pound, 15 feet square.
D Shearing house, 36 feet by 18 feet—14 feet posts.
1 Represents gates and doors.

Pound B is amply large for 400 sheep:—the small one C, has abundance of room for 80, but when shearing, I never permit more than half that number to remain in it:—the residue of the flock are let out to roam in the large yard A. Nothing is permitted to run in this yard previous to shearing, which is at all times thickly covered with grass, and consequently, is a very suitable plan for sheep to lay down upon. The small pound as Ben. Rogers says "is a *great thing*, as you need'nt run all over creation to catch a sheep."

My wool is stored in the second loft, in the floor of which is fixed a trap door, and from this is suspended the sacks when packing.

I close this communication, now, with regret, as much else could be added in reference to shearing, &c., of sheep—but my sheet is full. Yours,

Lansing, Tompkins Co., N. Y. M.

USEFUL EDUCATION.—The following excellent article from the Cultivator upon useful education should be read by every parent. It should be printed in letters of gold and be born constantly in mind by those who have the charge of children.

WHAT IS A USEFUL EDUCATION?

We put the question in reference to the great body of American youth, who are to earn their bread by the sweat of their brows, and, under Providence, to wield the future destinies of our country. Two principles should govern: *Teach them* TO PROVIDE FOR THEMSELVES HONORABLY, under any ordinary contingencies,—*and qualify them to become* USEFUL TO SOCIETY. The times, as well as universal experience, abundantly admonish us, that however the children of wealth may indulge in indolence and dissipation—while their means last,—the great mass of American youth must, and ought, to depend upon their labor for their fortunes and their usefulness. Fortune is at best precarious; patrimonial dependance is uncertain, and reliance upon the friendship or charity of

the world, or upon office, is frail and often debasing. Self-dependance is the only sure stay. *We are ever most willing to help those who help themselves.* Productive labor is the legitimate source of all our wealth, individual and national; and this labor is profitable to the individual and to the nation, *in proportion to the measure of intelligence and scientific knowledge which guide and direct its operations.* Hence it is of primary importance, that our youth should be efficiently taught to labor, and that their minds should be early imbued with that kind of knowledge which will instruct them in the principles of their business, render it honorable, and make them independent in conduct and in fortune.

We have, to be sure, colleges and academies in abundance, more than can be well supported, or that can be made economical and useful. But these are in a measure consecrated to the learned professions—to the privileged few—for they are privileged, inasmuch as they are the exclusive recipients of public bounty in the higher branches of learning. Productive labor derives little or no advantage from their teachings. Few of the youth who enter their halls ever seek for a livelihood in the laboring arts. They learn to look upon labor, as servile and demeaning, and to seek their level in what they consider the *higher classes* of society. They do not go to these schools to *learn to work*, or to *learn to live by work*,—in the common meaning of these terms—but to *learn to live without work—above work.* They are virtually withdrawn from the producing classes. These young aspirants flock to the learned professions, and the genteel employments, as the avenues to honors and office; and notwithstanding that labor is taxed heavily, in one way or another, to supply their real or imaginary wants, yet the *genteel* professions have become so overstocked, and the threshold of power so thronged with supplicants, that hundreds and thousands are thrown back, as parasites, upon society, exhibiting the melancholy spectacle of men, born to be useful, but unable, or unwilling, from the bias of a wrong education, to become so. Had these men been taught to look upon labor, as it truly is, a necessary, healthful, independent, and honorable employment, *and been instructed in its principles and its practice*, while young, they would have cherished its interests, respected its virtues, and cheerfully shared in its toils and its pleasures. We seek not, by these remarks, to pull down that which is, but to build up that which is not. It is not that we love a part less, but the whole more. We would raise the standard of labor, without depressing that of literature.

We have common schools too, munificently endowed, where all may acquire the *rudiments* of knowledge, but the rudiments only. They teach nothing of the sciences which are necessary to the successful prosecution of the arts—and give no instructions in the best models of practice. They neither learn the boy how to provide for himself, nor fit him for extensive usefulness. They lay the foundation, but they do little to build up and beautify the temple.

We find in the London and Westminster Quarterly, in an article on the means of lessening the evils of pauperism, some very apposite remarks upon this subject, which we here transcribe:

"We advocate," says the Review, "both for England and Ireland, the necessity of a national provision for the moral and industrial training of the young. In the old we cannot hope for much improvement. But the new generation springing up might be modelled to our will. Schools are wanted; but not such as are now spreading over the country, to teach a little reading and writing, as if that embraced the whole business of life, and the whole duty of man—schools in which both boys and girls should learn to employ both their heads and their hands—in which they should be taught practically the use of various tools, and in which such general information should be imparted, relating to different branches of industry, (the rights and duties of citizens,) and the resources of other countries and their own, as would enable them to begin to mount the uphill path they would have to climb in after life, with a heart full of hope, and with a spirit of energy and intelligence which no difficulties would overcome."

Who will tell us why it is, that classic schools, available only to those who design to live without labor, are made the special and exclusive objects of legislative bounty, in regard to the higher branches of instruction? Why is it, that six or seven thousand youths, which is about the number in our colleges and academies, should receive gratuities from the public treasury, till the aggregate exceeds three millions of dollars, to enable to live without work, while half a million of other youth, with like capacities and like claims, destined to labor, and to augment the resources, the wealth and the happiness of their country, are denied a miserable pittance, in the higher branches of knowledge, to qualify them for their more important duties in society? Is not knowledge as beneficial to the arts of labor, as it is to the learned professions? Is it not as efficiently and beneficially applied in developing the riches of the earth, in perfecting the mechanic and manufacturing arts, and in augmenting the products and profits of labor generally, as it is in the warfare of party politics, in the chicanery of the law, and in prolonging unprofitable debate in our legislative halls? May not natural science be as profitably studied and applied on the farm, where nature is constantly presenting new subjects of illustration and appliance, as in the town or in the closet? Is not chemistry, which instructs us in the nature and properties of all bodies, as useful to the farmer, in ascertaining the qualities of his soils, and their adaptation to particular crops, and in regulating the multifarious operations of husbandry,—and to the artizan, in managing his various processes,—as it is to the lawyer, the statesman, or the divine? There is probably no employment in life that embraces so wide a scope of useful study, as that of cultivating the soil. The great use and end of science is to improve art, to impress us with a sense of our obligations to God, and of our duty to man. In truth, science belongs to, and constitutes an integral portion of the arts, and cannot be divorced from them without throwing us back into a state of semi barbarism, such as now debases a great portion of the population of the old continent. Why then teach science exclusively to the few, who have comparatively so little use for it, and withhold it from the many, to whom it would be a help and a guide?

We look to Europe for precedents, and blindly adopt some that are prejudicial, as well as many that are good. We forget that we are a new people in government, manners and laws, and that there is no country which will serve as our model in all cases. The education bestowed upon the working classes in Europe is designed to qualify them for the subordinate stations in society—for labor and obedience, as *subjects.* There governments recognize a privileged class—who are the owners of the soil, and live upon the labors of the many. The working classes have very little to do with the affairs of government. Here all are professedly upon a footing of equality. All enjoy political rights, and have political duties to perform—and all should be equally favored, so far as the public bounty is dispensed in the means of obtaining useful knowledge, and of acquiring wealth and honors. We should take care to have good farmers and good mechanics, as well as good lawyers and good doctors. We want not only good *subjects*, but intelligent *freemen*—high-minded, independent freemen, "who know their rights, and knowing, dare maintain them." We wish to keep the fountains pure, that the stream of power may not become defiled. We wish to base our political and social fabric upon a rock, steadfast and sure—upon the intelligence, industry and moral rectitude of the great working community. When this class shall cease to exert a healthful and controling influence in political affairs, our boasted freedom will be at an end. A privileged class, whom the bounty of government has assisted to arm with exclusive power, will control and direct the political machine, as may best subserve their aggrandizing views, without regard to the common weal. Ambition is the same in all ages and countries. Man loves power, and is corrupted by it; and in its prolonged exercise, the servant will ever swell into the master. Our freedom can only be securely guarded by the vigilance of an enlightened, independent, prosperous yeomanry.

Men have tried all sorts of expedients, for thousands of years, to obtain wealth and happiness; and after all it has become pretty evident, that there is no course that wears so well—that is so self-approving—that is so certain in its success; that gives so much health, contentment and independence—the substantial elements of happiness—as habitual industry, tempered and directed by a cultivated mind,—be it in the learned or laboring professions. The consciousness, that we are not only providing for ourselves, and those naturally dependent upon us, but that we are doing good to society, and thereby fulfilling one of our highest moral obligations, is a rich source of enjoyment, to which the indolent and dissipated must ever remain utter strangers.

We say, therefore, that we want schools of moral, industrial and scientific instruction for the working classes of societ — that these classes are entitled to them—and that their establishment would conduce alike to the prosperity of the country, and to the perpetuity of our political and religious freedom.

To the Editor of the New-York Farmer.

KEY WEST, Tropical Florida, 12th July, 1837.

DEAR SIR. On the 28th ult., I addressed you a few lines with a circular from the President of the Agricultural Society of Louisiana. The bearer of that letter was A. A. M. Jackson, Esq., Clerk of the U. S. District Court whose address, while in your City, will be at 273 East Broadway. Wm A. Whitehead, Esq., the Collector of this port will carry the present brief communication, and his address during the summer will be at Perth Amboy, New Jersey. Having now been twenty-five days on this Inlet, during the worst season of the year, I can declare that I have been agreeably disappointed in the character of its surface, of its climate, and of its inhabitants. I had anticipated a barren bank of sand, but found a verdant woods on a limestone base. I expected to meet with stagnant ponds of putrefying materials exhaling pestilence and death, I find running inlets of the sea as pure as the waters of the deep ocean itself, which are sources both of health and wealth. I was told that the moschitos and sand-flies were so numerous that the inhabitants could scarcely breath without swallowing mouthfuls of these insects; but of sand-flies I have not yet seen or felt a single swarm, and of moschitos I can truly say that of these are never more than I have seen or felt during this worst season for them. Key West may challenge comparison with any equal surface on our coast, from New-York to New Orleans. But as I have not taken up my pen to give a detailed description or history of this Island, I will be as brief as possible in what I have to say. The whole Island, including the salt pond, contains only 1975 acres. The salt pond has a surface of 340 acres. The town at the N. W. extremity of the Island is in 24° 25′ N. L. and 82° 04′ W. Long. The subsoil of the Island is limestone, (not coral rocks,) and the soil a calcareous powder, (not siliceous sand,) colored by vegetable mould. This soil is said to be exhausted by two or three years exposure to the sun, so that garden vegetables are no longer cultivated. Sweet potatoes, however, and pumpkins continue to be very productive. Siliceous sand and clay would be very valuable here, as even the quantity requisite for masonry has to be brought from great distances on the mainland. But the greatest defect on this Island is the want of water. The rains are so few and so little, that they do not suffice for agriculture, and the wells do not furnish either the quantity or quality of water necessary for artificial irrigation. Nevertheless the vegetable growth on this Key demonstrates that there are valuable vegetables adapted to flourish in even this moreland soil and atmosphere. I therefore annex a brief list of the plants both indigenous exotic that have already fallen under my observation.

Indigenous.—The wild fig, the manchineel, the Campeachy teak or Jamaica dog-wood, the Gumbolembo or Almacigo, the nickernuts, 5 species of Cactus, the wild Papaya and it is said the Salinwood tree, &c., &c. I will give the botanical names in my next.

Exotic.—*Terminalia Catappa*, (or Indian Almond,) the *poinciana pulcherrima*, (or Chansiquin of Campeachy,) the *moringa pterigosperma*, (or oil of ben tree,) *Serbania picta*, (or Guacamaya,) *Cicca racemosa*, (or Gooseberry tree,) red Mulberry, wild lime, monœcious Papaya, Pride of China or India, the W. I. Tamarind and the Cocoa-nut palm.

The Cordia sebestena is by some said to be indigenous and by others exotic. But as I have arrived at the bottom of my page, I close for the present by subscribing myself very respectfully your ob't ser't,

HENRY PERRINE.

From the Genesee Farmer.

QUESTIONS RESPECTING THE ECONOMY OF CUTTING UP CORN—TOPPING CORNSTALKS SHOULD NOT BE PRACTISED.

It has we think been sufficiently ascertained, that when corn is injured by an early frost, cutting it up contributes nothing to its relief, and nothing to its subsequent improvement. It is we think better, in such cases, not to molest it, for unless the frost be a very deadly one, the corn will still derive nutriment from the stalks and leaves. There is another question related to this which we think merits the attention of agriculturalists. The question is this: Is it, in general, good practice to cut up corn at all, or to cut up the stalks while the ears are attached to them? We are not for war, and if we were disposed to answer this question in the negative, we should scarcely dare do it, knowing as we do that this would bring us into conflict with almost universal opinion. We will, however, suggest certain considerations, and leave the question to be adjudicated and settled by our readers.

1. Cutting up corn at any time before the leaves are fully dead, does undoubtedly injure the crop in some degree, affecting it probably both as to quantity and quality.

2. When corn is cut up, and the stalks secured in the best manner they can be, it rarely fails that some of them get down, and thus both the corn and stalks are damaged by exposure to the weather. If it were not so, the large butts and stems of the stalks are of little value for fodder, for no sort of stock will eat them, unless compelled to it by dire starvation.

3. If the stalks be left standing in the field, cattle will consume quite as great a portion of them in the field after the corn is gathered, as they would if they had been cut and gathered to the barn.

4. As materials for dung, stalks cannot be disposed of to better advantage than to be allowed to remain where they grew, and there be mixed with the soil, as is usually done by subsequent tillage.

5. Cutting up and securing a well grown crop of corn, is a heavy and toilsome labor, involving, together with the subsequent ingathering of the stalks, no trifling item of expense.

If these things be true, is it, in general, good practice to cut up corn at all? In times of threatened scarcity of winter feed for stock, it may be, and probably is, wise and prudent to do it. It may too be profitable to do it, in the vicinity of cities and large villages, where fodder commands high prices.

In agitating the question thus far, we have supposed that the stalks, if they were cut and gathered to the barn, were to be given to stock, without further cutting, or any other preparation. In the case of farmers who have good cutting machines, and intend by cutting to prepare their stalks for the use of animals, the question may assume an entirely varied aspect.

With a few occasional exceptions, our practice for several years has been, to let our corn remain unmolested, until the time of harvesting it. Sometimes we have cut up and gathered the stalks, after the corn had been separated from them. This, when corn is harvested early, can be done to advantage, and if cutting be practiced at all, we think this is the better way. More generally we have left our stalks to be depastured in the field where they grew.

The advantages of practicing as we have done, are supposed to consist, 1st. In a greater quantity and better quality of corn. 2d. In exemption from much toilsome and expensive labor. The only loss known to result from this practice, consists in the inferior quality of the stalks to be consumed as fodder. It does not appear that, as to quantity, there is any loss, for cattle will consume as great a portion of the stalks, while depasturing in the field, as they would if they had been cut, as is usually practiced, and given out in the barn yard. Neither does it appear that any thing is lost, in connection with the economy of manures. Or if there be any loss in this article, certainly it is very small.

We offer these remarks for the considerations of farmers. The question is, are the advantages which, in ordinary cases, result from cutting up corn while yet in a state of imperfect maturity, sufficient to balance the damages which it does to the crop, and the expenses of doing it?

Hitherto we have said nothing relative to the practice of topping cornstalks, which formerly prevailed almost universally

and prevails now to some extent. The economy of this practice has been the subject of so many experiments, and so much light in regard to it has of late been gained, and disseminated in the public journals, that it seems scarcely necessary to reagitate the subject. By many well conducted experiments, it has been proved most conclusively, that topping the stalks of corn, while as green as to be worth topping, essentially injures the crop, often causing a reduction equal to one fifth of its value. Among enlightened farmers, the practice of topping has fallen into general disrepute, and as it is most clearly an unprofitable practice, it should be entirely abandoned. DAN BRADLEY.

Marcellus, Feb., 1827.

FARMERS' CABINET.—We have received a few numbers of the, Farmers' Cabinet,—a semi-monthly octavo Agricultural publication, issued by Messrs. Moore and Waterhouse, 67 South street Philadelphia, at one dollar a year in advance. *It is worth more money*, and we hope it *will be well* supported.

We take pleasure in publishing the following notices from the Genesee Farmer.

The publication of the *Ohio Farmer*, at Columbus, we are pleased to learn, has been resumed. Semi monthly at $1 a year, S. MEDARY, publisher.

A new semi-monthly, called the *Western Agriculturist*, at $1 per annum, has been commenced at Ravenna, Portage County, Ohio,—E. R. SELBY, publisher.

The Farmer and Gardener, (the successor of the American Farmer at Baltimore) heretofore published at $5 per annum, has been reduced at $2,50, if paid within one month from the time of subscribing, or $3 if paid after that time. Notwithstanding this reduction in price there has been no reduction on the amount of matter given, or in the spirit and energy of its editor, E. P. ROBERTS—published weekly.

The price of the *Silk Culturist*, at Hartford, Conn., has been raised from 50 cents to $1, per year—it is cheap at the latter price. F. G. COMSTOCK, publisher.

The *Northampton Farmer and Sugar Beet Culturist*—a monthly at 50 cents a year—has recently been commenced at Nothampton, Mass.—L. FERRY, publisher.

TURNIP CULTURE.

Continued from page 236.

After the sowing is completed, the plants generally make their appearance in from five to eight days; and if the weather is showery, they will soon grow into what is termed the rough leaf when they are a couple of inches high. The process of horse hoeing then commences, by running the cultivator, or light plough, up and down between the rows, as near to the plants as can be done without injury, or within three inches of them, so as to cut up any weeds that may have sprung up. In two or three days this should be followed by the hand hoe. The weeds should all be eradicated, and the plants thinned, by drawing the hoe cross-wise of the row, so as to leave them standing single at the distance of eight or ten inches. The cultivator may be subsequently once or twice passed again between the rows, and the few weeds that will spring up be destroyed. The turnip crop may be advantageously followed with spring wheat or barley.

Quality.—The relative portion of nutriment afforded by each of the following species, has been estimated by the late Mr. George Sinclair, as amonnting, in 64 drachms, to

White tankard,	76 grains.
Common white loaf,	80 "
Norfolk white,	83 "
Stone or garden,	85 "
Swedish turnips,	110 "

The *Turnip Fly* is the greatest enemy to the crop; and although many preventives have been recommended, no particular one seems to have given full confidence. Soot and quick lime have been strewed along the drills, and on the young leaves, at the rate of six bushels per acre, with good success. This mixture is applied when the leaves are dry. Some sow radish seed with their turnips, which first attract the fly. The London Society of Arts awarded a gold medal for this mode of prevention, which consists in drilling thick, a row of common turnips between the rows of ruta baga. The fly destroyed the former, and spared the Swedes.

Gathering the Crop.—The roots may be generally drawn by the hand. or with a potato hook. They should be topped and tailed, and be permitted to lay upon the ground till the loose dirt separates from the roots. We have described the best mode of performing these processes in two or more of our numbers.—They should not be cut too close, nor the roots wounded, lest it causes them to rot.

Storing.—They may be stored in cellars or pits, as before described. Let the pits not exceed three feet in breadth, raise the roots a foot above the surface of the ground, sloping from the sides to the centre, cover with a good thickness of earth, and by all means take care to ventilate at the crown of the pile, to prevent the roots heating and becoming rotten.

Use.—The ruta baga, in particular, is eaten by all farm stock, sheep and oxen are fattened upon them. They are almost invariably fed raw, but require to be cut or sliced. There are machines for doing this in a summary way; but the labor is readily performed with a spade or meat smirk.

"The extended culture of the turnip," says Prof. Lowe, "has enabled us to carry the practice of breeding and feeding our domestic animals to a state of perfection, in which no other country has yet been able to rival Great Britain. The cultivation of the plant in rows, instead of the former method of broadcast, may well be regarded as an improvement of the highest importance. It has enabled the farmer to secure abundant returns, which the former methods of cultivation did not admit of, and so to increase the number of useful animals, that may be maintained upon the farm, and to subject the lighter soils to a species of culture more beneficial than any other that had been before devised for them."—[Cultivator.]

CROPS AND SOILS TO WHICH THEY ARE ADAPTED.

The annexed table, says the writer of British Husbandry, has been given by Von Thaer, as a classification of soils, which we deem entitled to particular attention, as in some degree governing the course of crops; for, although the real value of every rotation depends, in a great measure, upon the manner in which its several processes are executed; yet abstractly speaking, some courses must be viewed as better than others, because the crops may be more suitable to the peculiar qualities of the land on which they are to be grown. The last column in the table comprises an analysis of the comparative value of the different component parts, and is the result of many years careful examination of the soils, as well as the proceeds of the crops, after the deduction of labor and seed.

Nos.	SOILS.	Clay per cent.	Sand per cent.	Carb. of lime, per cent.	Humus per cent.	Value.
1	First class of strong wheat soils.	74	10	4½	11½	100
2		81	6	4	8½	98
3		79	20	4	6½	96
4		40	22	36	4	90
5	Rich barley land,	20	67	3	10	78
6	Good wheat land,	58	36	2	4	77
7		56	30	12	2	75
8		60	38	Small quantities in each.	2	70
9	Ordinary wheat land,	48	50		2	65½
10		68	30		2	60
11	Good barley land,	38	60		2	60
12	Ordinary barley land,	33	65		2	50
13		28	70		2	40
14	Oat and rye land,	23½	75		1½	30
15		18½	80		1½	20

It will be perceived, that the wheat soils possess from 40 to 81 per cent. of clay, and at least 2 per cent. of carbonate of lime, which latter seems to be an indispensable ingredient in a wheat soil; and that neither barley, oats nor rye, and we may extend the remark to Indian corn and turnips, require carbonate of lime, though this always gives a chemical and mechanical improvement to the soil, by rendering sand more compact, and more retentive of moisture and manure. Those soils in which sands predomi-

nates over clay, are best adapted to the growth of Indian corn and ruta baga, though for both they should be artificia ly enriched by a good coat of manure.

Nos 1, 2 and 3 are alluvial soils of the richest quality, and embrace much of the land of secondary formation west of the Allegany range: and from the large portion which they contain of vegetable mould, or humus, and the intimate state of mixture in which it is found, that they are not so stiff as the quantity of clay which they contain would seem to indicate. From the absence of carbonate of lime in our primary formation east of the Allegany, many districts, although having the other earthy ingredients and humus, are not congenial to the growth of wheat.

No. 4, is a fine clay loam such as abounds in many parts of this State, and is termed our best barley soil; and, although what may be termed strong land is yet of a texture which renders it easy to be worked; it is consequently evidently suitable to the alternate system of husbandry.

Nos. 6 and 7 are both good soils—the quantity of carbonate of lime compensating, in a measure, for the smallest portion of humus; but necessarily requiring the addition of a proportionate quantity of dung to supply that deficiency.

Nos. 9 to 13 are adapted to the Indian corn crop, always, however, requiring manure to render it profitable. They are of average quality of common tillage land; yet, from want of carbonate of lime, are sensibly improved by mild lime, drawn ashes and marl.

Nos. 14 and 15 are denominated light sands, which when manured and judiciously managed, by frequent alteration of grass, the application of gypsum, and the pasturing of sheep, may be kept in heart. and rendered productive.

Scarcely any soils contain more than five per cent. of humus; but if the staple of the land be loamy, even two per cent. will render it fit for the production of grain. The friability of its texture is, indeed, an object of the first importance, for it is a great saving of labor and expense; and if the ground be tolerably well managed and dunged, it can always be mantained in good heart.

The analysis which has been thus given of soils, extends only to the depth of six inches from surface, without reference to the subsoil. which may greatly affect their value; for however rich soils may be, if that be either too porus or too retentive, they may be rendered, in certain seasons unproductive. If, however, they contain a layer of nine inches to a foot of good earth, the subsoil may then be considered of little consequence; though a limestone bottom will always command a preference. The exposure, with regard to the sun, and the situation of the land, in respect to its shelter from cold winds, are, also, objects of extreme importance that they may make a difference in point of climate equal to several degrees of latitude. This should serve as a hint to those who commence improving new farms or who have wood land in reserve, to leave a belt of wood on the exposed quarters of their farms or fields.

Our readers will be able to perceive from the foregoing, that it is of importance to the farmer to be able to ascertain the composition of his soils. The analysis of soils may be taught in our schools, as readily as a rule in arithmetic—if our school masters knew how to teach the process.

The following circular, addressed by Mr. Colman to the Farmers of Massachussets, evinces a determination to enter thoroughly into the business, for which he was appointed:—

Sir,—Having been appointed by the Executive of the Commonwealth, under the provisions of a Resolve of the Legislature, passed at its last session, Commissioner to make an Agricultural Survey of the State, I take the liberty of addressing this Circular to several gentlemen of intelligence and respectability in the different towns, yourself among others, with a view to obtain their advice and co-operation in accomplishing such survey.

You will allow me, then, to point out the general objects of inquiry; and to solicit particularly your attention to them; that when I visit you, as I shall ask the pleasure of doing you will be able to give me, in respect to those which have been the subjects, either of your experience, inquiry, or observation, the desired information. By the Resolve it is made the duty of the Commissioner "To collect accurate information of the state and condition of the Agriculture of the Commonwealth, and every subject connected with it; point out the means of improvement; and make a detailed report thereof, with as much exactness as circumstances will admit." From the terms of the Resolve it is apparent that the duty is very comprehensive; as it embraces every subject connected with the agriculture of the State, and the means of its improvement. The more full however it is, the more useful it is likely to prove; and exactness in the information obtained is obviously of the very highest importance. I will now point out some of the objects to which inquiries will be directed.

I. The nature of the Soil, in different parts of the State; and particularly in reference to the crops cultivated.

II. The Climate, with reference to the crops grown; the usual time of ploughing, planting, and harvesting; the occurrence of early frosts; the length of winter; the average temperature; and the quantity of rain and snow in any year.

It is desirable that meteorological observations should be made in different parts of the State.

III. 1. The Number of Acres in any town cultivated or in any form productive.
2. in wood, timber, &c.
3. capable of cultivation but unproductive.
4. waste or irreclaimable.

IV. Products.
1. The amount raised in any town in any given year.
2. The average yield in any crop per acre.

V. Crops cultivated; among which are the following:

Wheat	Hemp.	Herds Grass.	Potatoes.
Indian Corn.	Flax.	Clovers.	Onions,
Rye.	Tobacco.	Red top.	Cabbages.
Barley.	Hops.	Orchard.	Carrots.
Oats.	Broom Corn.	Lucerne	Parsnips.
Buck Wheat.	Teasels.	Tall Meadow	Beets.
Peas.	Madder.	Oats.	Artichokes.
Beans.	Woad.	English Bent.	Pumpkins.
Tares.	Saffron.	Rye Grass.	Turnips.
Lupins.	Rape	Millet.	Fruits.
	Mints.	Foul Meadow.	Garden Vege-
		Blue Grass.	tables.
	Grass for Bonnets.	Salt Meadow Grasses.	
		Thatch.	
	Mulberry for Silk.		
	Sunflower for Oil.		
	Poppy for Opium.		
	Mustard.		
	Succory.		

VI. Other Products.

Wool.	Beef.	Mutton.	Cheese.
Silk.	Pork.	Lard.	Butter.

VII. Rotation of crops.

VIII. Modes of Cultivation.
1. Soils adapted to particular crops.
2. Preparation of the soil by ploughing and manures.
3. Seeds; selection; change of seed; quantity; preparation; steeps for seeds; preservation of seed from worms, birds, and vermin.
4. Care and management of the growing crop.
5. Harvesting. Time and manner.
6. Use and application of the product.
7. Labor required; and general expenses of a crop.
8. Value of the crop for use or sale.
9. Marketing of the product.

IX. Diseases of Crops. Blight; mildew; rust; curl; &c., &c.

X. Weeds, and Methods of Extermination.

Thistles; Canada thistles; brake; laurel; ox-eyed daisy or white weed; rannunculus or Butter cup; wood wax; pineweed; St. John's wort; charlock and cadluc; sorrel; cockle; tares; chess or cheat, &c., &c.

XI. Refuse of Crops. Preservation; value, and use for fodder or manure.

1. Value and use of the Stalks and Husks of Indian Corn, and how preserved.
2. Value and use of the Stalks and Husks of Broom Corn.
3. " " of the Straw of the Wheat, Rye, Oats and Barley.

4. Value and use of the Haulm of Pease and Buck Wheat
5. " " of Potato Tops, &c., &c.

It may be useful in this place to give an outline of the manner in which it may be desirable to conduct the inquiries. I will take for examples, Wheat and Indian Corn.

Wheat.

1. History of its Cultivation in the State

2. Kinds; bearded or bald; flint or soft skin; red or white; summer or winter; where obtained; by what name or quality designated; average weight per bushel.

3. Amount of any particular crop; extent of land sown.

4. Condition of the land; nature of the soil; whether newly cleared; burnt; swarded; or how used for two or three years previously; how prepared for sowing.

5. Kind and quantity of manure; use of lime; plaster, or any compost manure.

6. The quantity of seed to an acre, and preparation of the seed; advantages or evils of steeping the seed.

7. The time of sowing; week and day, if possible to be ascertained. The importance of such an inquiry as this will appear for the reasons which follow:

It is strongly recommended that wheat should be sown before the 14th of September, so as to be well rooted before winter; thus affording a better protection against frosts. Or else so late as not to germinate before spring; this method has been tried. Or frozen in water in the autumn and kept so until the spring, which experiment is reported to have been successful. It is often desirable for wheat to follow Indian corn; but Indian corn in general cannot be taken off in season to get the wheat sown. The discovery of any mode, such as the above for example, by which the necessity of this early sowing could be obviated, would be of great advantage.

Wheat sown early is more likely to have passed beyond injury from the hot, damp, steaming weather, which occurs in July and occasions rust. Query; whether late sown wheat is not likely to pass beyond that season before it gets into a condition to be injured, which is while it is in the milk.

Late sowing of wheat, as in some cases the last of May and the first of June, it is stated, has carried the season of flowering beyond the time of the wheat insect, and the crop has been saved.

8. The diseases or accidents, if any; whether affected by rust, smut, or mildew; and any circumstances of weather, situation, or particular condition of the plant connected or contemporaneous with such occurrence. The situation or exposure of any blighted field, whether high and airy, or low, damp, and confined.

9. Whether or not affected by the vicinity of barberry bushes.

10. Whether winter killed or not; under what circumstances as it regards the forwardness or lateness of the plant; and how affected by the snow.

11. Whether attacked by the Hessian fly or other insects; and preventives, if any.

Wheat is, in many parts of the country, subject to injury from an insect or worm, whose appearance is comparatively recent; and whose habits are not well ascertained. He is making dreadful havoc in the wheat regions, producing in many cases, an entire destruction of extensive fields of the most promising appearance; and has advanced at the rate of forty miles a year. The same insect, it is believed, though the identity is not perfectly ascertained, has attacked barley, rye, and oats with alarming success. The cultivation of barley has on this account been abandoned in some parts of the State; and so has the cultivation of wheat in what have heretofore been deemed some of the most productive wheat regions in New-York.

Inquiries and experiments on this subject are of immense importance. A perfect preventive or security would be worth millions to the country.

12. Remedies or protection against blight, or other accidents.

13. The extirpation of weeds particularly injurious to the wheat crop, such as tares, cockle, chess, garlic, and the Canada thistle; and any machinery by which the grain may be cleansed of "foul stuff."

14. The experience of farmers in the cultivation of wheat crops successively on the same land; and in sowing clover with the wheat with a view to ploughing it in as manure for a succeeding crop; and whether customarily ploughed in with the stubble; or depastured; or mowed for one or more years.

15. The general subject of sowing grass with grain; and the value in such case of a stubble crop for winter fodder.

16. Harvesting.

Time and state of cutting; and whether early or late cutting be preferable; the time, in the opinion of some persons, making a material difference in the amount and value of the crop.

Modes of harvesting; reaping or cradling; and cost by day or piece work; average amount of a day's work.

17. Threshing and Cleaning.

Threshing Machines. Winnowing Machines.

18. Manufacture of Flour. Various qualities. Number of bushels required for a barrel. Miller's charges and profits.

19. Construction of Mills and flouring Machinery. Water, steam, and wind power. Domestic Mills.

20. Value and uses of bran.

21. Value and uses of Wheat Straw.

22. Value of a wheat crop compared with other crops. Average yield.

23. Capacity of the State to furnish its own wheaten bread.

24. Experiments and observations in regard to this crop.—Causes of its general failure.

25. Some general estimate of the quantity and cost of imported flour consumed in any village, town or county.

Indian Corn.

1. Kinds. Gourd seed. White soft Corn. Sweet Corn. Flint Corn.

2. Varieties of Flint Corn. White; yellow. Weight per bushel. Comparative amount of cob and grain in different varieties.

3. Soils most suitable. Preparation of land. Crop, if any, which it may best succeed. Fall or spring ploughing. How often may it be repeated on the same land.

4. Manuring; kinds of manure most suitable; quantity to the acre; how distributed—in hills, drills, or spread—applied green or rotted.

Lime; its value to Corn—how applied.

Gypsum; its value to Corn—how applied.

Ashes; its value to Corn—how applied; crude or spent.

5. Seed—how selected; effects of selecting in increasing the crop; how saved; steeped or sowed dry; various steeps; copperas water; lye; rolling in tar; coating with gypsum or ashes; quantity of seed.

6. Time of planting; modes of planting—in hills or drills; distance of plants; protection against vermin or birds.

7. Cultivation. Weeding; ploughing or harrowing among corn; use of a cultivator; number of hoeings; hilling or earthing up. Topping; suckering; stripping; with the effects upon the crop.

8. Value of the corn stalks and leaves when taken green; and mode of curing.

9. Alternate rows of corn and potatoes. Planting pumpkins or turnips among corn. Sowing grain among corn for a succeeding crop.

10. Harvesting. Gathering by the ear; or cutting up and stacking in the field.

11. Preservation of the Grain. Construction of Granaries.

12. Preservation and comparative value of the stover or dried fodder.

13. Machines for shelling.

14. Average yield per acre; value of the crop; cost of cultivation from beginning to readiness for the mill. Kiln-drying.

15. Value and uses of Indian Corn—for Dairy Animals.
" " " for fattening stock.
" " " for swine.
" " " for horses.
" " " for distillation.
" " " for extraction of oil.

(To be continued.)

FARMER'S WORK.

HARVESTING.—It is a correct general rule, to reap wheat and rye before they become dead ripe. The proper time is when

the straw begins to shrink and become white about half an inch below the ear. This appearance indicates that the grain has ceased to receive nourishment from its roots; and by cutting too late, the loss is considerable, both in the field and under cover. By cutting early, provided the corn is not taken to the barn or stack too green, the following advantages will be gained: 1st. The grain will make more and whiter flour. 2d. There will be less wasted by the grain's shelling. 3d. By commencing harvest early, you will have a fairer prospect of finishing before the last cuttings will become too ripe, so that much of the grain will shell out in reaping and securing the crop. 4th. If you cut your grain as soon as it will answer, the straw and chaff will contain much more nourishment, than if it were bleached and made brittle by the sun, air, dew and rain, all of which combine to deprive it of most of its value for fodder. 5th. Should you plough in your stubble soon after harvest, or mow it, and secure it for fodder or litter, (either of which modes of management would be perfectly according to the rules of good husbandry,) the stubble will make much better fuod for your cattle, or manure for your ground, than if it had yielded all its sweets, and much of its substance to the sun, air and wet weather.

If your wheat or rye is much affected by blight or rust, it should be cut, even while still in the milk, and exposed to the sun and air, till the straw is sufficiently dry, and the grain so much hardened, that it may safely be deposited in the barn or stack. The heads in such cases should be so placed by the reapers as not to touch the ground. This may be done by placing the top end of each handful on the lower end of the preceding one. Loudon gives the following directions for harvesting wheat:

"The mode of reaping wheat is almost universally by the sickle. When cut, it is usually tied up in sheaves, which it is better to make so small as to be done by bands the length of the straw, than so thick as to require two lengths to be joined by bands. The sheaves are set up in *shocks* or *stooks*, each containing twelve, or if the straw be long, fourteen sheaves. In the latter case, two rows of six sheaves are made to stand in such a manner as to be in contact at the top, though in order to admit the circulation of air, they are placed at some distance below: aleng this line, two sheaves more are placed as a covering, the grain end of both toward the extremities of the line. In a few days of good weather the crop is ready for the barn or stack yard. In the stack yard it is built either in oblong or circular stacks, sometimes on frames supported to prevent the access of vermin, and to secure the botton from dampness; and as soon afterwards as possible, the stacks are neatly thatched.—When the harvest weather is so wet as to render it difficult to prevent the stacks from heating, it has been the practice to make funnels through them, a large one in a central and perpend cular direction, and small lateral ones to communicate with it. In the best caltivated counties, the use of large barns for holding the crop is disapproved of, not only on account of the expense, but because corn [grain] keeps better, or is less exposed to damage of any kind, in a well built stack."

Poudrette Company, or *Cleanliness, Health* and *Economy*. A Company will be organized in a few days, for the purpose of preparing this valuable manure. One of the main objects of the Company is to introduce an improved, or far less offensive mode of emptying sinks in this city.

The improvement consists in removing the contents *without exposure to the atmosphere, while on the way from the yard to the cart*, or *to the place of deposite*—and also avoids, and will *prohibit* the present practice of throwing 40 or 50 loads of filth *into the river every night.*

Shares in the Company are One Hundred Dollars each.—Every Subscriber will be entitled to appropriate as many bushels of manure annually, at *half the market price*, as he may subscribe dollars.

Those who may prefer not to subscribe to the company, and yet desire to contribute to its success, can do so by depositing *ten* or *twenty* dollars with the agent, which amount will be placed to the credit of the depositor, and entitle him to the services of the company in emptying sinks, at *five* cents the cubic foot, until the amount is thus balanced.

Information will be given, and subscriptions received, at the office of the NEW-YORK FARMER, No. 30 Wall-street, *basement story.*

☞ The Company *is now* organized. The chemical, and manufacturing department, will be under the care of Peter Barthelemy, Esq, who introduces the improved plan. The business generally, will be under the care of D. K. Minor, at the office of the *New-York Farmer.*

*** The last few numbers of the New-York Farmer contain several articles in relation to its use and value in *Europe.*

D. K. MINOR.

New-York, July 19, 1837.

To the Editors of the New-York Farmer.

Sir,—I see in your No. of the 1st inst. an article from the London Mechanics' Magazine, relative to the discovery of M. Ganal, of Paris, for the preservation of dead bodies and the study of anatomy in summer as well as in winter time. Allow me to correct the assertions of the writer.

Two years ago M. Ganal submitted to the Royal Academy of Medicine in Paris, a preparation of his for the preservation of dead bodies to facilitate the researches of anatomy. I have seen at the Hotel-Dieu, bodies that had already been kept for nearly five months, without the least decomposition, while the limbs and flesh retained the same elasticity, which they had immediately after death had occurred.

The body taken out of the compound could be placed upon the table, ready for the scalpel, and could again be placed in the compound to be retained for future dissection. In this case the compound should always be weakened,

The preparation is very simple, consisting of different substances in certain proportions—and the cost is very small, 16 pence being sufficient for the preservation of a human body.

But *it is not injected into the veins* nor *into the carotid artery* as the English Journal asserts. If indeed, this were the case, would not the scalpel release the fluid, and then what would become of its virtues.

Not long ago a man by the name of Tarquinia, I believe, physician in ordinary to the King of Naples, discovered a mode of preservation, and M. Ganal may have been induced to make some further experiments upon the preservation of anatomical specimens for *museums*, but this discovery must not be comfounded with the other.

The process of the Neapolitan Doctor consists only of arsenic dissolved in water, in the proportion of 2 pounds for a human body, and injected into the arteries by a small pump. This process however, has been found deficient, the body undergoing no apparent alteration for 5 or 6 months, but after that time it becomes very hard and dry, the skin turns yellow, and in less than a year it is converted into a complete mummy.

Of the last process of M. Ganal I know nothing, but I am confident that it has nothing to do with his other method, useful both for the preservation of subjects in the amphitheatre, and for their transportation to a distance for the purpose of dissection.

An Amateur.

From the Cultivator.

THE HARVEST PROSPECT, has brightened surprisingly within the last six weeks. In the valley of the Mohawk, through which we have recently passed, we never saw crops look more propitious to the hopes of the farmer, than they now do, considering the backwardness of the season. The wheat, there, stands pretty well, and were it not for apprehensions from the grain worm, the prospect would be that of a good crop. Many of our readers abroad identify this insect with the hessian fly, and others with the wevil. It is neither. The hessian fly preys upon the stock of the wheat; the wevil upon the ripened grain, in the barn or in the bin; the grain worm destroys the wheat in the germ or milk: The spring grain and grass look very well, where any attention has been given to draining; and even Indian corn, though got in late, has come up well, and is of a good color. There has been an abundance—an excess of rain; and although "spring lingered long in the lap of winter," yet the warm weather in the last of and first of June has caused such a luxuriant growth, that if the coming month is favorable, and the nipping frosts of autumn are delayed, the corn crop will yet be a tolerable good one. The prospect of the crops farther west, we are happy to learn, is equally flattering. Abundant crops will do more to mitigate present evils, than a hundred banks. The truth is, that as a national family, we bought sixty-four millions of dollars more last year than we sold—and the sixty-four millions balance must be paid before we can have easy times—*must be paid from the profits of agriculture.* Banks enrich individuals—good crops the country—the whole country. Then let us "speed the plough," and honor and instruct those who guide it.

(From the Cultivator.)

THE WOOL MARKET.

As clipping time is near at hand, I have thought some remarks on the subject of wool would not be uninteresting to those who are engaged in sheep husbandry. I am largely interested myself, and with a view of learning the actual state of the market, I have just visited many of the manufacturing towns of Connecticut and Massachusetts.

In consequence of the extensive failures or suspensions of many of the large commission houses in New-York the manufacturers were more or less embarrassed. The losses of some were so great as to cause a failure, while others, witnessing the the storm around them, immediately stopped their mills and discharged their hands. The great majority of woollen mills are of this class, who stopped from expediency, more than necessity. They have worked all their wool and finished all their goods, and only wait for a change of times to start their machinery again.

Nearly every mill has on hand the cloths manufactured in the last four months, and they will not be sent to market till the fall sales commence, when fair prices will doubtless be obtained.

The stock of domestic woollen goods in Philadelphia, New-York, or even in the country, is not large. There is no difficulty from an over supply. It is well known that there will be few or no woollen goods imported this season, and our own manufacturers will have the entire benefit of the market.

The present state of affairs prevents the importation of either wool or woollen goods. The duties are required to be paid in *cash*, when imported, which now amount to almost prohibition. Indeed, since the bursting of the credit-system, as practised by importers, goods will hereafter, from necessity, be imported for cash. cash.

All these things will eventually help our manufacturers, by giving them the market of this country, quite as effectually as by an extensive tariff or duties.

June, 1837. Yours, &c. OSTEGO.

From the Edinburgh Quarterly Journal of Agriculture for June.

The late period of receiving our foreign Periodicals prevents us from making further extracts for this number.

ON AN IMPROVED METHOD OF MAKING CLOVER-HAY.

BY MR. JOHN PROUDFOOT, INVERESK.

[The Editor says that hay-making is perhaps the worst conducted operation in Scottish husbandry, and the object of the Society in offering premiums for Essays on the best method of making both clover and meadow hay, is to urge the general adoption of a superior management in securing the crop of that valuable and nutritious winter provender. It is to be hoped that the success attained by the writers of the following essays will prompt other hay makers to adopt the practice described by them. A premium of Ten Sovereigns was awarded for this essay.]

The present practice of making hay in the neighborhood where I reside (and, I believe, it is much the same throughout Scotland) is liable to many objections. The chief of these are, 1st, That of allowing the grass to be "too ripe," as it is generally called, before it is cut. 2d, Allowing the grass to be on the ground till it either be rotted with bad weather, drenched with rain, or dried up by too long exposure to the sun.

The method I have adopted for the last three years is very simple, but, in my opinion, a very secure one for our changeable climate. It is as follows:—This year (1836) I commenced cutting a field of grass of ten acres, on the 1st of July, just when the flower was going off the rye-grass, which I conceive to be the true criterion for cutting. This field was sown down with 12 lb. of the best Dutch red clover, and 1 lb. of white ditto, with 2½ pecks of best Ayrshire annual rye-grass per imperial acre. It was a most excellent crop, and, as quick as five men could cut it down, women put it up close behind them in the following manner:—taking hold of the grass by the top, and placing it neatly round the left foot, keeping the foot *steadily* in the heart of the handful, then tying a little band round the top, to keep it steady in the upright conical position, and when the foot is removed the aperture serves for a ventilator. Thus nearly all the surface of the grass is exposed to the air, and if the hollow cones are neatly put up, they will be almost safe from the weather, as, in case of rain, it runs off as fast as it falls.

If the weather is at all favorable the conical handfuls will be ready, in twenty-four hours, for turning out, and putting up into small cocks the same day; but they may, with greater safety be allowed to remain in the first position until ready for putting up into large cocks. I am of opinion that the less turning clover-hay gets the better, as the oftener it is turned its value is deteriorated, more especially after getting rain.

One-half of the field was turned out of the handfuls, the other half allowed to remain until it was ready for being put into cocks and my manner of making cocks is this:—A man stands at the cock, to whom the women bring the handfuls, which he puts neatly up, always keeping the tops of them to the centre of the cock, in a direction sloping upwards, from him, so as the slope may throw off the rain. In thus carefully constructing the cock little vacuities will be left *between* the handfuls to act as ventilators, the influence of which will very soon render it proper to put the hay into larger cocks. In one week I had all the hay of the ten acres put into ricks of 130 or 140 stones, in which state I conceived it to be proof against *any* kind of weather,—indeed, were it not that purchasers were expected to take it "*off the rick;*" it might have been put into the stack. I may mention, that the rain fell less or more almost every day, excepting on Sunday the 3d, and Monday the 4th, but on the 5th there was a severe thunder-storm, *and, notwithstanding this most unpropitious weather, I made nearly* 4000 *stones of hay in the finest condition, in one week from the time it was cut; and as to its quality,* I think I am not too bold when I say, that I am not afraid to challenge the county of Edinburgh.*

The great advantage of this system over the common one in a bad season is, that *one* hour's sunshine will have more effect in drying the hay than a whole day; I have this year seen hay lying on the ground for weeks together, and the aftermath growing up through it, which is destructive both to the hay and the second crop; but if the system which I have described *be followed out,* I will venture to say that the hay will not only be infinitely superior, *but in the end will be put up at less expense* than in the old system, under the most favorable circumstances.

I have also converted the second crop into hay over the same ground with equal success, notwithstanding the bad weather, and all the obstacles incidental to making a second crop of good hay.

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* Testimonials of the superior quality of the hay were furnished to the Society by the author, from Sir John Hope of Pinkie, and William Aitchison, Esq. younger of Drummore.

Extract, the specification of Edward John Dent, of London, for an improvement of the balance springs of Chronometers.—Mode of preserving them from rust.

SPECIFICATION OF THE PATENT GRANTED TO EDWARD JOHN DENT, OF THE STRAND, IN THE COUNTY OF MIDDLESEX, CHRONOMETER MAKER, FOR AN IMPROVEMENT OF THE BALANCE SPRINGS, AND THEIR ADJUSTMENTS, OF CHRONOMETERS AND OTHER TIME-KEEPERS.—SEALED APRIL 23, 1831.

It is well known that the delicate spiral balance-springs of chronometers and other time-keepers, and their adjustments, are exceedingly liable to injury from oxidation or rust, both during the progress of their manufacture and when in use, and whereby they are not only subject to decay, but their rates of going or accuracy of performance is very considerably varied from time to time. Now this said oxidation or rust may either be caused by the moisture ordinarily contained in the atmosphere, especially in the in the sea air in voyages, or in countries particularly exposed to its action. Nor are chronometers only liable to suffer from these causes, but also from the perspired matter and the breath of the workman during the progress of their manufacture. Now it is the chief object of my invention to prevent, as far as possible, the said oxidation or rust, by coating or defending those delicate parts of chronometers with a coating or varnish, sufficiently flexible to allow the perfect free action of the balance-springs, and yet capable of preventing the action of moisture or saline and other vapors to which they are liable to be exposed. And I hereby claim as my invention, and the object of this patent, the use and application of any fit and proper flexible defensive coating or varnish to the more effectual prevention of oxidation or rust in the balance-springs and adjustments of chronometers and other time-keepers. In order, however, to afford an example of the best means I am acquainted with for carrying my said invention into effect, I will describe the composition of such a varnish or coating as I have found to answer the purpose completely.

"I take half an ounce by measure of pure spirits of turpentine, and put to it forty grains of camphor, and also add ten grains of bruised gum copal to the said mixture; I then heat it nearly to its boiling point, and keep it in that state for two hours. I then filter the mixture through cotton, or other proper substance. This varnish should be kept in an air-tight bottle, closed by a glass stopper, the mouth of it being sufficiently large to admit the balance-spring and its adjustment, which are to be put into the bottle in a dry state, and free from oil or grease, and after being completely immerged in the varnish, are to be carefully drained before they are removed from the bottle. The balance-spring and its adjustment must then be placed into a temperature from 200 to 300 degrees of Fahrenheit's thermometer, and be kept therein from six to eight hours. I would remark that in place of using pure spirit of turpentine and camphor, I prefer to use half an ounce of an oil found in portable gas reservoirs, when that oil can be obtained; but as portable gas is now but little employed, and is going out of use, the materials I have above described will be found to answer well, and may be readily obtained from chemists, care being observed in obtaining pure spirits of turpentine.

BOUNTY ON WHEAT.

A late act of the Legislature of Maine, gives a bounty of *two dollars* to the person who raises 20 bushels of well cleaned wheat, and six cents per bushel for all over thirty bushels. This is a good encouragement, and we hope it will be the means of arousing our farmers to do their best.

With our natural advantages, seconded by industry and enterprise, with improvements that are making in the introduction of valuable kinds of seed, new methods of culture and new machines for threshing, winnowing and cleansing grain, and with the spur to action now giving by the bounty, we believe that every farmer among us will endeavor to excel in raising wheat, and we shall no longer pay millions to other states for breadstuff, and use foreign grain raised in a climate less congenial to its growth than our own.—[Yankee Farmer.]

CURE FOR SLABBERING IN HORSES.

Thomas Paine, of Paine's Hollow, recommends that when horses slabber, on being pastured in clover, they be turned into dry, or old pasture, or fed with hay or oats.

From the Mechanic's Magazine.

MR. BURDEN AGAIN.

Nature appears to have invested few individuals with that quantity and kind of intellect which is necessary to invent useful improvements; and the time and study of inventing and perfecting, and often the pecuniary expense of putting them into practice too frequently subject their inventors, though the most useful class of people, to poverty; and ungrateful neglect and cold contempt are often the reward of the person whose talents have conferred more benefit on mankind than could have been effected by the hard labor of thousands or perhaps millions. These circumstances cannot fail to be a subject of regret to a person whose mind is capable of appreciating the value of those services, and it is, therefore, commensurately pleasing to meet with the rare occurrence of an inventor of the first order, who has the talent to command from the public, the remuneration, both in money and respect which is so justly his due.

Such is the individual whose name is at the head of this article, which is not designed so much to gratify his independent mind as to encourage others to imitate his example. When in very moderate pecuniary circumstances, his invention for making wrought iron spikes, which he put in immediate practice renders his own inspection and for his own emolument, together with his usually industrious application to business, raised him in a short time, not only above want, but to a handsome degree of independence.

But notwithstanding his necessary attention to an extensive business, he found time to invent and arrange the plan of a boat which he was convinced would effect an important improvement in steam navigation. Instead of making this the subject of stock jobbing and hollow speculation, he determined to test its value at his own cost and risk, though it would incur an expense beyond the ordinary means of a common individual. It was vigorously and soon effected, and on experiment bid fair to realize his strongest anticipations. But an unforeseen disaster, arising from no defect in his boat, in a moment destroyed it and his hopes together. But he had the proud satisfaction, that the disaster involved no one's interest but his own, and that he was able to pocket the loss, without any sacrifice of credit.

In a short time, he astonished the public, and even the world, with his machinery for making horse shoes, which in the short space of a few hours, converted a ton of iron in to those articles of very superior quality, and which has, probably, already much more than remunerated his loss, as it is not only supplying his own country with horse shoes, but the invention is already successfully established in actual use in several countries of Europe.

But as the mind is naturally inclined to revert to the source, where it sustained great loss or suffered any severe disaster, the subject of steam navigation, no doubt, presented itself at frequent intervals, in all the shapes which an inventive imagination could suggest. He is now once more before the public with a steamboat on a plan entirely original and differing altogether from his former boat and from any other in operation, and whatever minor defects future experience may discover, it is certainly possessing many and important advantages over any other boat heretofore constructed. It will possess far greater strength than could be obtained by timber or any other material by any other mode of combination. It will draw less water, probably by one third, in proportion to its length and burthen than any other boat in use; and its capacity for the accommodation of passengers will be at least equal to its improvements in other respects. It is now afloat on the water and will probably in a short time be in operation, finished and furnished in a style worthy of its character. as a description of the principles and form of this boat, in its present state of advancement, would perhaps be considered premature, it will not be attempted; at a proper time should an opportunity occur to examine it, unless previously given by some abler pen, it will be forth coming from

ARCHIMEDES.

A skilful agriculturist will constitute one of the mightiest bulworks of which civil liberty can boast.

COLT'S NEW FIRE ARMS.—The board of officers appointed under the resolution of the Senate of the United States for examining and testing the improvement in fire arms, which met at Washington last winter and adjourned to meet at West Point, are to assemble at the latter place the present week. The Courier states that Mr. Colt has made some recent improvements, and that he can now fire 100 charges in the incredibly short space of *ten minutes*. Several officers of the army have given orders to Mr. Colt for braces of pistols. It is also said that a supply of these arms will be brought to market soon, from the manufactury at Paterson.—[Newark Daily Adv.]

DIVISION OF LABOR IN WYTCH MAKING.—In consequence of a minute subdivision of labor in this trade, it is said that there are only three places in England, Scotland and Ireland, where a complete watch can be manufactured—London, Liverpool and Coventry. The business has been introduced at the latter place, since the year 1800; and the number of persons employed in it there, is now supposed to equal the number in the metropolis. [Buffalo Com. Adv.]

CHEMICAL COMPOSITION OF ASSES' MILK.

From a memoir on the chemical compo ition of Asses' Milk, by E. Peligot, we learn that this milk differs from others in the considerable proportion of sugar of milk which it contains, and that to this we ought in all probability to attribute its medical properties.

The medium of 16 analysis gives in 100 parts of asses' milk,

Solid matter,	9 53	Butter,	1.29
Water,	90.47	Sugar of milk,	6 29
		Caseum,	1.95
	100.		

The solid portion varied in different specimens from 7 to 11 per cent. of the milk.

The quality as well as quantity of the milk was found to vary materially with the food. Of four different kinds of provender, beets were found to yield a milk the richest in solid matter—next a mixture of Luzerne and oats, then potatoes, then carrots. The selected quantities of milk were with,

Beets,	1.500 k.
Oats and Luzerne,	1.500
Potatoes,	1.250
Carrots,	1.000

Much depends also on *the time* at which the milk is drawn—thus, milk taken at 1½ hours, 6 hours and 24 hours after the previous milking, gave:

	after 1½ hours.	after 6 hours.	after 24 hours.
Butter,	1.55	1.40	1.23
Sugar of milk	6 65	6.40	6.33
Caseum,	3.46	1.55	1.01
Solid matter,	11.66	9.35	8.57
Water,	88.34	90.65	91.43
	100.	100.	100.

As this last result is directly contrary to common opinion, the experiment was repeated after a lapse of six hours and of 12 hours from the previous milking, and found to coincide with the above.

But, on dividing the milk, obtained at the same milking, into three equal portions, they were found to contain,

	first part.	second part.	third part.
Butter,	0.96	1.02	1.52
Sugar,	6.50	6.48	6.45
Caseum,	1.76	1.95	2.95
Solid matter,	9.22	10.45	10.94

Thus proving the correctness of the common opinion, that the strippings afford the richest milk.

M. Peligot proved that by giving to an ass thirty grains of ioduret of potassium for six days, the milk contained iodine at the end of the period, as was evident by the action of starch upon it, and of a chloride. Ten grammes of common salt per day was detected by the taste of the milk, and by analysis. A chloride given, five grains per day to an ass, and twelve grains to a goat, was not discoverable in the milk.

The milk of an as, to whom thirty grammes of bi-carbonate of soda was given for six days, was very alkaline even when first taken from the udder. This experiment was repeated 15 times, whereas the milk of the ass has ordinarily an acid reaction. G.

[Annales de Chemie et Phys.]

COLUMBIA RAILROAD.

Amount of the following articles arrived at and cleared from Philadelphia, by the Columbia Railroad from the 1st of January, to the 30th June, inclusive.

ARRIVED EAST.

Bacon,	1,780,469 lbs.	Lumber,	736,955 ft.
Butter,	64,993 lbs.	Oil,	8,961 galls.
Cotton,	124,468 lbs.	Pork,	587 bbls.
Flour,	48,699 bbls.	*Provisions	59,318 lbs
Glass,	2,322½ bxs.	Seed,	1,685 bush.
Grain,	108,202½ bush	Sundries,	1,219,142 lbs.
Iron, Bar	1,064 389 lbs.	Tobacco,	475,146 lbs
—— Castings,	453,857 lbs.	Wheat,	10,405½ bush.
——Other kinds,	112,648 lbs.	Wool,	46,356 lbs.
Lard & Tal.	313,339 lbs.	Whiskey,	199,435 galls.
Leather,	184,833 lbs.	*Kind not specified.	

DEPARTED WEST.

Cotton,	158,867 lbs.	Iron,	290.617 lbs.
Fish,	4,605 bbls.	Merch'dize,	10,303,732 lbs.
Groceries,	7,043.868 lbs.	Plaster,	1,375 tons
Hemp,	171,296 lbs.	Wheat,	41,032 bush.
Hides	329,032 lbs.	Wool,	173,195 lbs.

CARS CLEARED.		TOLLS RECEIVED.	
January,	987	January,	$4,707.66
February,	1,145	February,	5,783,76
March,	2,031	March	18,597,96
April,	2,395	April,	18,103,38
May,	1,422	May,	17,320,03
June,	1,894	June,	13,387,32
Total,	9,794	Total,	77.810,11

During the same period in 1836, the arrivals and clearances were as follows:—

ARRIVED.

Bacon,	1,362,434 lbs.	Castings,	262,885 lbs.
Butter & Cheese,	66.977 lbs.	Cotton,	163,395 lbs.
Flour,	56,419 lbs.	Drugs & Dyes,	186,633 lbs.
Ginseng,	77,724 lbs.	Fish,	1,544½ bbls.
Glass,	938 bxs.	Furniture,	325,960 lbs.
Grain,	110,545 bush.	Groceries,	4,478,571 lbs.
Iron, all kinds,	2,262,062 lbs.	Hemp,	187,313 lbs.
Lard & Tal.	106,968 lbs.	Hides,	186,589 lbs.
Leather,	35,250 lbs.	Lead,	27,552 lbs.
Pork,	223 bbls.	Oil,	9,877 galls.
*Provisions,	72,349 lbs.	Paper,	179,412 lbs.
Rags	69,990 lbs.	Plaster,	5,951 tons
Seed, Corn, &c.	18,582 bush.	Rags,	191,093 lbs.
Sundries,	330,265 lbs.	Salt,	7,847 bush.
Tobacco,	1,450,719 lbs.	Sundries,	370,580 lbs.
Wool,	43,927 lbs.	Wool,	121,617 lbs.
Whiskey,	176,785 galls.	Tolls received, in June, $13,-181,72.	
*Kind not named.			

PENNSYLVANIA CANAL AND RAILROAD TOLLS.—Receipts for toll on the State Canals from 1st Nov last up.

to July 1st, 183	$274,673,17
Railroad Tolls,	160,045,02
Motive Power,	119,768,31
Total amout,	$560,487,71

(From the Genesee Farmer.)

BARTRAM BOTANIC GARDEN.

Mr. Tucker,—In conformity with my promise to you when at Rochester in the month of May, I purpose occasionally sending for your pages such matter as I may deem worthy of notice. I flatter myself the following observations respecting the first botanical establishment ever attempted in America, its founder and his successors, with its present state in the scale of Botany and Horticulture, will be acceptable to many, particularly the gardening portion of our readers.

Bartram Botanic Garden is situated on the west banks of the river Schuylkill, about three miles from Philadelphia. It was established by that venerable and enthusiastic naturalist, John Bartram the elder, in the year 1720. The worthy founder of these gardens discovered in his early youth a love for philosophy and natural history in general. He was however particularly drawn to the study of botany from considering the importance of vegetables in the practice of medicine, and their indispensable use in various departments of human economy. But at that time botany was but little attended to in America, and in the old world the works of the great Linnæus had not appeared; he had therefore no other aid in studying the great book of nature than his own persevering genius. His view in the establishment of the garden was to make it a deposit of the vegetables of the United States, (then British Colonies,) as well as those of Europe and other parts of the world, that they might be more convenient for investigation. He soon furnished his grounds with the curious and beautiful vegetables in the environs, and by degrees with those more distant, which were arranged according to their natural soil and situation, either in the garden or on his plantation, which consisted of between 200 and 300 acres of land, the whole of which he termed his garden. The novelty of this horticultural scene attracted the notice of the ingenious and curious, and coming to the knowledge of Europeans, several scientific men in England, particularly of the Royal Society, united to encourage the founder to undertake journies towards the western frontiers, in order to discover and collect various non-descript productions in nature, particularly vegetables, that they might be sent to Europe.

From the American edition of Ree's Cyclopædia, I learn Mr. Bartram corresponded with *Linnæus, Lord Petre, Sir Hans Sloane, Dr. Fothergill,* and many other eminent men. The former said in one of his letters, that he (Mr. Bartram) was the greatest natural botanist in the world. He employed much of his time in excursions through the provinces, from the shores of Lake Ontario to the source of the river St. Juan in East Florida. He was appointed American Botanist to his Britanic Majesty George the Third, in which appointment he continued till his death in Sept. 1777, in the 76th year of his age. Mr. B. was a native of Delaware county, Penn. John, the youngest son, succeeded his father as proprietor of the Kingsess Botanic Gardens, but they were chiefly under the superintendence of his brother, Mr. Wm. Bartram, well known in the literary world by his travels in East and West Florida, the Cherokee country, &c., &c., who accompanied his father on many of his extensive botanical tours, and who seems to have inherited his unwearied zeal and vigorous capacity for that sublime science. The fame of this gentleman extended to both continents; in his sphere he was one of the most useful men in America; his knowledge was acquired by incessant bodily labor; the fields of natural science in his days were unexplored, and he resorted to the study of nature where she unfolded her works to the senses as the only true source of knowledge. To this gentleman we are indebted for the discovery of many new and rare plants, and among others the *Franklinia Alatamaha,* (Gordonia pubescens,) a beautiful tree so called in honor of Dr. Franklin. At the solicitation and expense of the celebrated Dr. Fothergill of London, he made excursions to the Floridas and to the western parts of Carolina and Georgia, in search of rare and useful productions of nature, but chiefly of the vegetable kingdom, to which gentleman he sent his collection of plants, dried specimens and drawings. The work already alluded to was the result of these travels. This work was published almost simultaneously in Germany, in Dublin, (Ireland,) and the United States.

A few minutes before the death of this enthusiastic admirer of nature, he was writing an article on the natural history of a plant, and in rising from his desk to take a morning view of the botanic grounds, he had only proceeded a few steps from the door, when he burst a blood vessel, which suddenly closed his useful life, July 22, 1823, in the 85th year of his age.

The gardens are now in the possession of Col. Carr, to whose indefatigable exertions, aided by that of Mrs. Carr, the gardens owe their present celebrity, for they are the admiration of every visitor, whether native or foreigner. Mrs. Carr is the daughter of John Bartram the younger, but to speak in just terms respecting her enthusiasm for plants, (which is only equaled by her success in their cultivation,) is a task I am incompetent to perform, for I am not possessed of words which could convey in the most remote degree the passionate fondness with which she toils among the plants, and in every department, from the earliest dawn until darkness renders her operations impracticable. Mrs. Carr's botanical acquirements place her in the very first rank among American botanists. Her knowledge of American plants is most extensive, not surpassed, if equaled, by any one in the United States. But to this lady and her uncle, Mr. Wm. Bartram, the world is under another deep debt of gratitude, for it was to the friendly conversations and instructive communications of the latter that Alexander Wilson, my countryman, first imbibed, or at all events carried his passion to such an extent for the native birds of America. To the former (Mrs. Carr) he was principally indebted for his knowledge of and his proficiency in drawing. To their combined efforts we are indebted for his American Ornithology.

In examining Bartram Botanic Garden, one characteristic feature will be obvious to the most inattentive observer, viz: the large specimens of various trees planted by John Bartram, the elder, and his son Wm. Bartram. While on a visit to the garden in the month of November, 1831, I was forcibly struck with their magnitude, (see Loudon's London Gardener's Magazine, vol. 8th, page 284,) but then, and on several succeeding visits, I could not dedicate time to ascertain their exact dimensions; however, with the assistance of Mr. Carr, Jr., I have recently been enabled to gratify myself on this point, having accurately measured thirty distinct species, the dimensions of which were as follows:

No.	Circumference. feet.	inches.	Height. feet.
1. Æsculus flava,	6	4	90
2. Ailantus glandulosa, (25 years old,)	4	2	55
3. Andromeda arborea,	3	10	60
4. Bignonia radicans,	3		
5. Buxus sempervirens—*vel. variegata,*	2	6	25
6. Castanea pumila,	2	9	
7. Cercis canadensis,	3		35
8. Chionanthus virginicus (one limb of.)	2	6	20
9. Cornus florida,	2	9	30
10. Cupressus disticha,	23	9	123
11. Cyrilla caroliniana,	2	1	
12. Drospyros virginica,	5	7	70
13. Gordonia pubescens, (Franklinia)	3	8	52
14. Gymnocladus canadensis,	5	2	80
*15. Dirca palustris,	25	6	6
16. Halesia tetraptera,	4	0	45
17. Juglans divæformis,	4	6	70
18. Magnolia accuminate,	6	3	80
19. ——— auriculata,	4	1	50
20. ——— tripetela,	3	0	35
21. Morus rubra,	4	1	40
22. Pinus microcarpa,	4	4	
23. —— picea,	5	5	85
24. —— resinosa *vel. rubra,*	4	9	75
25. Porcelia glabra,	1	10	30
26. Quercus alba,	12	0	80
27. ——— heterophylla	3	9	50
*28 Rhododendron maximum,	45	0	15
*29. Stuartia virginica,	60	0	20
30. Thuyra occidnetalis,	3	5	40

☞ Those marked with an asterisk were measured round the branches, and the whole for the circumference were measured about 6 feet from the ground.

As before mentioned, the gardens are situated on the west bank

of the Schuylkill river, about 3 miles from Philadelphia, and contain about eight acres of ground, compactly filled with the choicest ornamental trees, shrubs and herbaceous plants, properly located in their natural soils and altitudes as far as practicable. The mansion and green houses stand on an eminence, from which the garden descends by gentle slopes to the river. From the mansion are distinctly seen the winding courses of the Schuylkill and Delaware, with the broad spread of meadows and cultivated farms up and down those streams. Beyond these there is an interrupted view of the Jersey shore, from the eastern to the southern horizon. The whole comprehends an extensive prospect, rich in the beauties of its scenery and endless in diversity.

The exotic department in the garden is very extensive, and comprises the following houses.

	Length. feet.	in.	Width. feet.	in.
1. Green house,	50	0	30	0
2. Orange house, &c.	30	0	15	0
3. Geranium house,	65	0	11	6
4. Propagating house,	21	6	11	10
5. Rose house,	49	0	13	6
6. New Holland and Stove,	68	0	14	0
7. Geraniums, roses, &c.	26	6	10	6
8 and 9. Rose Pitts,	63	0	7	0
10. Cactus house,	20	0	8	0

No expense is spared in procuring every desirable notice for the exotic department, and in the Geraniacæ, Camelliceæ, and Cacteæ, this garden is particularly rich. Independent of the Botanic Garden, there is a very extensive Nursery connected with this establishment, occupying upwards of 12 acres, compactly filled with choice fruit trees, ornamental trees, shrubs, &c. Col. Carr has, by the most indefatigable exertions, imported the choicest varieties of fruit trees from the different horticultural establishments in England, France, Germany, &c. Col. C. not only imports scions of all that is rare and valuable, but also trees for immediate sale, the demand for fruit trees in the western country being much greater than the existing establishments can supply. The unwearied zeal of the proprietor renders his nursery inferior to none in the United States, as respects the variety of fruits, ornamental trees, shrubs, &c. The whole establishment does great credit to the owner, who is universally respected, but not more esteemed for his laudable exertions and correctness in the various department of his establishment, than for his amenity as a gentleman.

Immense quantities of seeds collected in this garden from the old specimens are annually exported to Europe. The garden is the resort of the Philadelphians, the casual visiter, and in fact of the tourist in general—they command universal admiration. In fact, the great variety they contain of the choicest American shrubs—the enormous magnitude of many, and the extensive collection of exotics, must prove as a source of attraction to the amateu , and an interesting field for the scientific. But to convey an idea of the estimation in which these gardens are held, I may here mention that the Philadelphia and Baltimore railroad, now constructing, as originally planned, would have gone through the very center of the gardens, and sacrificed the most splendid of the specimens, but the railroad company, with a desire to preserve them entire, altered the route at an additional expense to themselves of 10,000 dollars. Such a magnanimous act was highly meritorious, and deserves the gratitude of an American public.

Col. Carr corresponds with many scientific gentlemen in Europe, and in North and South America, consequently the garden is a depot for all that is rare and valuable.*

I am, dear sir, yours very truly,

ALEXANDER GORDON.

Philadelphia, July 3, 1837.

* It is I understand the intention of Col. Carr to dispose of the gardens, green houses. &c. Should he meet with any gentleman who would preserve them entire, or if the Philadelphia Hor. Soc. would purchase them, he would make a considerable sacrifice. To any gentleman devoted to Botany what an opportunity here presents itself, and it is sincerely to be hoped that either the Society will purchase them, or that some amateur will step forward and possess himself of this rich and charming establishment. A. G.

HOW TO IMPROVE A POOR FARM.

RICHARD A. LEONARD, of Middletown, N. J. has furnished us an interesting account of his manner of improving a worn-out farm, and of the sale of its products the last year; and we regret that from the great accumulation of matter on hand, we cannot give his letter in detail We are obliged to content ourselves with a brief abstract of material facts.

Mr. Leonard came into possession of 90 acres of cultivated but exhausted land, in May, 1833. In that year the sale of its products amounted to $550,88; in 1834 the sale amounted to $718,05; in 1835 to $1,125,04; and in 1836, notwithstanding the unfavorable season, and the failure of most of his staple crops, to $1,166,13—thus more than doubling its products, by judicious management, in three years. His expense during the last year, for labor, dung and freight, amounted to $254,72—thus leaving him a nett profit on the farm, of $912,41—or more than $10 per acre per annum. We will quote Mr. L's. statement of the means he adopted to thus double the fertility of his soil.

"My farm," says he, "was in so low a condition that it would not produce more than ten bushels of rye, or twenty of corn per acre; and as I had no other income but what I could make upon this poor farm, I set about farming in earnest. I found it was in vain to attempt improvement without manure, so I contrived to get about 400 loads a year, 300 of which I made in the following manner. I have marl, though of very inferior quality. I cart about 100 loads of this into my barn yard. and by yarding my cattle upon it through the season, contrive to increase it to 200 loads. I also cart about 50 loads to my hog pen, on which I keep my hogs the year round. In this way I got 100 loads more, which is excellent for potatoes, corn, &c., and as my farm is situate near the bay, I obtain from New-York, annually, from 50 to 75 loads of the best stable dung, at about $1 per load on delivery, and by mixing it with the earth, &c., make up the 400 loads. By this treatment I find my land improve rapidly, and my income in like proportion. But I am sorry to say there are many farmers among us who are still pursuing the old land-killing system, scarcely making both ends meet. I might say something concerning the beneficial results of under draining, and of lime as a manure; but I conclude for the present."

This communication affords a worthy example of prudent industry and good management, and shows that even a poor farm, well managed, may be rendered more productive than many a good farm now is under bad management.—[Cult.]

ROOT CULTURE.

The root, and particularly the turnip culture, which has been extolled as the basis of improved husbandry in Great Britain, is rapidly extending among us; and we confidently anticipate from it the best practical results. Five years ago there was not probably two hundred pounds of ruta baga seed sown in the state: this year tons of this seed have been sown; and the culture of mangold wurtzel and carrots, has been also greatly extended. One seedsman has imported 26 cwt. of ruta baga seed, and this probably has not been more than a quarter, or a third, that has been sown. The supply has been exhausted, from Baltimore to Boston, and yet the demand has not been supplied. Our neighbor, Thorburn, has sold this season 1,500 lbs. ruta baga seed; 150 lbs carrot do.; 100 lbs. parsnip do.; and 150 lbs. mangold wurtzel do.; and, as indicating the extended culture of roots, and the advance of agricultural improvement, we add, that he has also retailed seventy cultivators; eighty drill-barrows; and seventy-five of Green's straw-cutters. We record thes facts as affording, in our mind, substantial proofs of a propitious change, and of the efforts to improve, which are now being manifested in our agricultural community. And from the spirit of inquiry which is abroad, and the general circulation of agricultural periodicals, we hazard little in saying, that the rising generation will be better farmers, and more enlightened men, than their fathers have been. Let every young farmer ponder upon these facts, and to stimulate him to honorable exertion, let him remember, that he who aims to excel, will at least attain mediocrity; while he who aims at mediocrity, will generally fall short of it. Cultivate the mind, as the sure means of increasing the profits of the hands.—[Cultivator.]

ECONOMY OF MANUFACTURE.

It sometimes happens that when theoretical laws, holding good to a certain extent in practice, are carried to extremes, the result is very different from that practiced, if not entirely the reverse.

Any one who has carefully noticed the prices of various articles during the last three or four years, cannot have failed to remark several anomalies in the relations usually conceived to exist between the plenty or scarcity of money and high or low prices. It is true that some of these are only apparent, but still we are inclined to think that the test of the "extreme case" will doemlish many of the commonly accepted principles of Political and Manufacturing Economy.

Our attention was drawn to this subject while reading an article in the last No. of the American Journal of Science and Arts, on the salt works of Zipaquera near Bogota, in New Granada, by J. H. Gibbon, M.D. This paper contains not a little amusing information in regard to the manufacture of salt.

We refer however to the annexed extracts, in which the writer seems to think that want of civilization and improvement counteracted the expected results. We, however, are inclined to think that results not very different might have been obtained earer home.

The first instance related, the Company were producers, and the people consumers.

"The masses of salt are dug from the rock by means of crow bars, and in its impure native state, is bought by the people of certain districts of the country, who thus prefer it; while others will purchase it only after being purified and hardened by calcination, although the price for both kinds is now the same. The consumption of grained salt, made in pans or *calderos*, is very trifling; the salt undergoes this process of crystallization before it is calcined; and it was supposed that the ability and desire on the part of the Company to supply grained salt at a lower price would increase the consumption of it, especially in the vicinity of the works. But "ancient custom" has still more influence with these people than any arguments of special or political economy, and arrangements which are well appreciated elsewhere, have often no sort of influence upon their minds, in comparison with former prepossessions. Some years ago the price of the rough natural rock salt, in the state in which it was dug from the mountain, was suddenly reduced, the expense of cutting it out being trifling compared with that of the process of calcination. As one portion of the population gave it the preference, it was presumed the consumption of it might be augmented in other districts; but the people who had formerly purchased this kind in preference, could not understand the sudden decrease in its value, and were prejudiced to believe that the salt was "rotten," as they said, or that there was some peculiar cause not apparent to them, and therefore suspected why the reduction took place; so that the Company found it better to keep the price at the former rate—there was then no diminution in the consumption. The abstract reasonings of political economy, it appears, must have reference always to the condition and information of those among whom its principles are to be applied."

In the next the order was inverted, the people producing, and the Company consuming.

We think the padre deserved much credit for his knowledge of "political economy" and still more for his knowledge of "human nature" the study of which, by the way, is the true basis of all political economy.

"Upon one occasion there was a great demand by the company, who wished to extend their operations, for the earthen ware pots in which the salt is calcined; these are made altogether by the Indians. The gentleman who had charge of the works, in order to effect the supply, as he thought, offered double the usual price for these necessary articles; still there was a great deficiency. In this dilemma he applied to the priest of the parish to aid him with advice, and to know what plan he should pursue to obtain the required number of pots for the work. The padre, having heard the fact of the payment of an increased price for the pots, shook his head, and observed, that since the people received so much more money than formerly for their labors, they occupied their time in spending it, instead of making more pots. He advised that the price, which was originally three medios (18¾ cents.) for each pot, and had lately been increased to three reals, (37½ cents.) should be *lowered* to three quartillos, (9 cents.) The plan was tried, and the stores were soon found filled with a superabundance of earthen ware."

From the Genesee Farmer.

CURE FOR THE FISTULA.

As your useful paper is made much more so by publishing any useful discovery, or valuable information, without pretence to either, I send you the following result of my experience, which you are at liberty to publish if you think it worth an insertion.

A few years since I had a fine horse about six years old, that I had purchased in the south part of Ohio, shortly before. From an injury from his collar, or some other cause, a large tumor arose on his withers, but shortly after proved to be a fistula. I tried various remedies said to be specifics, all to no good purpose. Having had no little experience of the action of arsenic upon the human body in similar cases, I was thereby induced to try it upon my horse. Accordingly I took a small piece of cloth, wet it and rolled it over and over in dry arsenic, and in the shape of a small roll, thrust it to the bottom of the tube and secured it there about ten hours. At the end of the time, finding the tube detached from the animal except a little at the bottom, I then separated it from the horse with a sharp knife. It healed readily and has showed no disposition to return since.

I have much faith in the use of arsenic for one or two more applications in similar diseases. Let those who wish try it, then say what they think of it.

The arsenic acting as a caustic, destroys the vitality of the parts in contact with it.

Yours respectfully, SPECTATOR.

Brighton, N. Y., July 3, 1837.

advertisements.

GEORGE HALL.—Information is wanted of George Hall of the city of New York, who left Newburgh last September; if this should meet his eye, he will hear of something to his advantage, by addressing a letter to his Sister *Jane Hall*, 46 Oak street, New York.—Any information concerning him, will be thankfully received by his Brothers and Sisters as above directed.

New-York, June 15th, 1837.

THIRD ANNUAL FAIR OF THE MECHANICS' INSTITUTE OF THE CITY OF NEW-YORK.

The *Fair* of the Institute will be held at Niblo's Garden, commencing Monday, September 25th, 1837.

To render this exhibition worthy of the arts and of the ingenuity of the Mechanics of our country, the Managers appointed to conduct the approaching *Fair* have determined to make such liberal arrangements as will insure to the contributors a fair opportunity of exhibiting their productions to the greatest advantage.

The object of Exhibition Fairs is to present to the members of the Institute and their fellow citizens who are engaged in the Mechanic Arts, the means of making their skill and ingenuity known in a way no other facilities afford: the many thousands who visit such exhibitions have a much better opportunity of judging of the merits of the various productions, than they would have by a mere verbal or newspaper description, besides the advantage of seeing brought together, in one vast collection, the products of the skill, ingenuity, and industry of our country.

PREMIUMS of Medals, Diplomas, &c. will be awarded for *all* worthy or meritorious articles exhibited, either as it respects superior workmanship, machinery wherein the operations are new, interesting or important, where ingenuity is displayed, or taste manifested, and particularly for all new and useful inventions.

You are respectfully requested to send, for competition or exhibition, specimens of the articles you manufacture; and you may be assured that the strictest impartiality will be observed in the distribution of the Premiums.

Steam power will be provided for the accommodation of those who wish to exhibit Machinery in operation; an experienced

Superintendant will take charge of this department, and contributors in this branch are particularly invited to send or bring their Machines or models as early as possible, on the 23d September, that the necessary arrangements may be made in relation to shafting, pullies, &c.

The Managers, in conclusion, cannot but express their belief that this Third Fair of the Mechanics' Institute, will exceed in variety and beauty of display, all previous exhibitions of the kind.

GEORGE BRUCE, *Chairm.*
WM. EVERDELL,
C. CROLIUS, JUN.
THOS. EWBANK,
RICHARD BRAGAW,
} *Executive Committee.*

N. B. All articles for competition must be delivered to the Committee at Niblo's Garden, on the 23d September. Those for exhibition *only* will be received any day during the Fair, before 10 o'clock A. M.

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RULES AND REGULATIONS.

1.—The Garden will be opened for the reception of Goods, on Saturday, 23d of September, from 6 o'clock A. M. until 9 o'clock P. M., and it is respectfully urged that all articles intended for competition may be sent in early in the day. Those articles intended for exhibition *only* will be received any day during the Fair, before the hour of 10 A. M.

2.—The Fair will open for visitors on Monday, 25th Septem. at 10 o'clock A. M., and continue open every day of the exhibition till 10 o'clock P. M.

3.—Competent and impartial Judges will be appointed to examine all articles presented, and premiums will be awarded on all such as shall be declared worthy.

4.—The Committee on Premiums, and all firms or partnerships in which they may be interested, shall be excluded from competition or the award of any premium.

5.—All persons depositing articles, either for competition or exhibition, must attend to have them registered by the Clerk, at which time they will receive a certificate, which will be required of them when the articles are returned.

6.—Proof of origin must be furnished if required, for any specimen offered for Premium.

7.—Depositors will receive a ticket from the Clerk, which will admit them and Ladies during the Exhibition.

8.—Arrangements will be made to exhibit, in operation, all working models that may be deposited—contributions in this branch are invited—a competent person will take charge of all models sent for the above purpose.

9.—The morning of each day, until fifteen minutes before 10 o'clock, shall be appropriated exclusively to the Judges.

10.—Members will receive their tickets of admission by applying at the Institute Rooms, any time in the week previous to and during the exhibition.

11.—All articles offered by Apprentices, will be received, and adjudged as the production of Apprentices—they must furnish a certificate of name, age, with whom, and the time they have served as apprentices.

12.—Articles subject to injury by being handled, should be secured in glass cases—and contributors are requested to have a person to take charge during the hours of exhibition—in the intervals, efficient measures will be taken to protect property.

GENERAL COMMITTEE.

George Bruce,	John Ridley,
John M. Dodd,	Silas B. Simonson,
James J. Mapes,	Thomas F. Peers,
Thomas Ewbank,	Thomas G. Hodgkins,
Wm. Everdell,	George L. Spencer,
C. Crolius, Jr.,	Peter Wemmell,
A. J. Mason,	Richard Bragaw,
Thos. W. Bartholomew,	Ab'm Peitch,
A. Storms,	Wm. H. Hale,
Wm. Ballard,	Wm. J. Mullen,
Henry Cunningham,	James Thomson,
John Harold,	Abner Mills,
Joseph Trench,	L. D. Chapin,
James D. Phyfe,	A. Cammeyer,
John H. Mead,	Hiram Tupper,
John Conroy,	H. B. Robertson,
Jordan L. Mott,	James Thomas,
Samuel Carter,	H G. Stetson,
George F. Nesbitt,	Ferris Owen,
Henry Worrall,	N. Berry,
W. B. Worrall,	O. Whittelesey,
James B. Cummings,	M. W. Emmons,
James Frost,	J. S. Anderson.

MECHANICS' FAIR.

Notice to Mechanics, Artisans, Manu-facturers, &c.—The undersigned give notice that the first Annual FAIR of the Massachusetts Charitable Mechanics' Association will be held in the city of Boston, in September next, commencing on Monday, the 18th, and continuing at least three days.

The Association have placed at the disposal of the Board of Managers, the sum of Five Thousand Dollars, to enable them to conduct the Fair upon a liberal scale; and they hope to be able to render satisfaction to all who may feel disposed to offer articles for exhibition.

Medals or Diplomas will be awarded to the owners of all articles that may be deemed worthy of such distinction; and the Managers intend that the strictest impartiality and fairness shall be observed in the distribution of Premiums.

The Managers, in furtherance of the object they have in view, invite contributions, of articles from every department of industry; of choice specimens of American ingenuity and skill; rare and valuable domestic productions, natural or artificial; the delicate and beautiful handiwork of females; useful labor-saving machines, implements of husbandry, and new models of machinery in all their varieties.

Judges will be appointed to examine all articles offered, and the managers will award a gold or silver medal, or a diploma, to all articles that may be pronounced by the judges worthy of reward.

Articles intended for exhibition, must be delivered on or before Wednesday, Septem ber 13th.

Arrangements will be made to exhibit, *in operation*, any working models that may be offered, which will render the exhibition useful and interesting, and the managers respectfully invite contributions in this branch. A careful and competent superintendent will be appointed to take chare of all models sent for this purpose.

Board of Managers.

Stephen Fairbanks, Jos. T. Buckingham,

John Rayner,	James Clark.
William Adams,	Henry W. Dutton,
Uriel Crocker,	George Darracott,
Gardner Greenleaf,	Wm. S. Pendleton,
James L. Homer,	Charles A. Wells,
James Barry,	Henry Bailey,
Joseph Tilden,	Jonas Chickering,
Ephraim Harrington,	Henry H. Barton,
Joseph Lewis,	Thomas Boyd,
Walter Frost,	Wm. Uunderwood,
Thomas J. Shelton,	George G. Smith,

John G. Rogers.

P. S. For any further information address JAMES L. HOMER, Corresponding Secretary, Boston.

Boston, March 24, 1837. m28–tsl

THE MAGAZINE OF HORTICULTURE, BOTANY *and all Useful Discoveries and Improvements in Rural Affairs*,—Edited by C. M. HOVEY, and published Monthly, at $3 per annum, by HOVEY & Co., Cornhill, Boston, and Israel Post, Bowery, New-York.

THE NEW-YORK FARMER AND AMERICAN GARDENER'S MAGAZINE,—Is published *semi-monthly*, at No. 30 WALS-ST., *basement story*, at *Three Dollars* a-year, *in advance*, by D. K. MINOR & GEO. C. SCHAEFFER.

THE CULTIVATOR, J. BUEL, Esq., Editor, is published at Albany, Sixteen pages, once a month, at Fifty Cents a year, *always in advance.*

If any of our citizens, who have encountered and survived he storm, desire a comfortable residence on a productive farm, in a healthy part of the country, we would invite their attention to the advertisement of Mr. John White, in this number. His farms, we have reason to believe, are well worthy of notice.

GREAT BARGAINS.

THE subscriber offers for sale 322 acres of Land, known as the late Cook & Haner Farms, on the beautiful valley, near Manlius Centre, in this county - the limestone creek running through it, on which are three Dwellings, three Barns, good Orchard, 200 acres under good improvement, the stumps out, and well calculated for two farms. The Erie canal in sight, *south* and the *Syracuse and Utica Railroad located and being made* about 20 rods from and parallel with the *north* line, and where is to be the first watering place and station from Syracuse for taking in passengers &c. from Fayetteville, the southern and northern villages, &c. For grain, or grass and grain, for the Sugar or Root business, a better soil cannot be found in any country. When this railroad is completed, fifteen or twenty *minutes* of Syracuse, two hours of Utica, a few hours of all the river cities and New-York; indeed, when the railroad now making from Boston to Albany is completed, within a few hours of all the principal eastern cities. Upon these great thorough fares, and all these advantages, surrounded by flourishing villages, strong competition will always secure on the premises, the highest prices for all its products. This is one of the most splendid farms in the state.

ALSO, for sale 120 acres of Land on the Oswego canal *between* and *immediate'y* at the junctions of the Seneca and Oneida Rivers, embracing the late widow Eno Plat, Tavern stand, &c. &c. The meeting of these splendid rivers, convenient harbor, the canal—one of the great travelling and commercial thorough fares, to the west, the beauty of the spot, surrounded by a fertile country, indicate this as a favorable spot for a flourishing village, or for a residence, farming, gardening, *profit* and *pleasure;* no situation on the North River can be more desirable—the favorable spot for the stations for all the Packet and Line Boats—for a public house, mercantile establishments, and where every thing raised can be sold at the highest prices.

ALSO, a farm of 160½ acres, bounded on the *west* by the Chittenango river, and on the *north* by the flourishing village of Bridgeport, or "the Rifts," two miles south of the Oneida lake, on the northern and shortest travelled road from Utica to Rochester, cultivated, and the stumps out of nearly a hundred acres, fertile and beautiful land, enough of which may be sold for village lots in a few years to pay for the whole. At the head of navigation, at this village, are quite extensive hydraulic advantages —mills, carding and dressing, tannery, stores, public houses, schools, &c. &c. combining to render this a very desirable farm

ALSO, a valuable Cedar Lot about two and a half miles north of Chittenango.

ALSO, as Agent some very valuable Farms in Onondaga and Madison counties.

The above mentioned Farms will be sold on highly advantageous terms. JOHN WHITE.

Syracuse, Onondaga, Co. New-York., June, 1837. 10—m4

FLOWER SEEDS—DAHLIAS, &c. The present month is a suitable season for sowing annual flower Seeds: the subscriber offers for sale a very extensive variety, including many that are new and beautiful, received from London, Paris, and Amsterdam. Packets of 20 select and showey varieties, inclosed in an envelope, with directions for management, $1; a collection of 500 sorts, $5.

Also, Double Dahlias of the most choice varieties, for which a separate catalogue is furnished, can be packed to carry to any part of the country.

Also, White Italian Mulberry Seed, Chinese, do French Sugar Beet Seed, Mangel Wurzel, Ruta Baga, with a general assortment of seasonable Garden Seeds, growth of the last year.

GEORGE C. THORBURN,
11 John street, near Broadway.

☞ Strangers visiting the city are invited to call in the day time —the Aviary and Picture Gallery will be found worthy of inspection. May—6

CONDITIONS OF THE FARMERS REGISTER.—1. The Farmers' Register is published in monthly numbers, of 64 large octavo pages each, and neatly covered, at $5 a year—payable in advance.

2. Or five *new* subscribers by sending their names and $20 at one time to the editor, will receive their copies for one year, for that sum, or at $4 for each. Purchasers of any 5 volumes (except Vol. I.) at one time in like manner, shall have them for $20.

3. The risk of loss of payments for subscriptions, which have been properly committed to the mail, or to the hands of a Postmaster, is assumed by the editor. *All mail payments must be made in notes or checks of par value in Virginia.*

4. For all copies not received by mail, at the proper post offices, duplicates will be furnished to those subscribers who have complied with their own obligations.

☞ 5. If a subscription is not directed to be discontinued before the first number of the next volume has been published, it will be taken as a continuance for another year. Subscriptions must commence with the beginning of some volume, and will not be taken for less than a year's publication.

☞ 6. The mutual obligations of the publisher and subscriber, for the year, are fully incurred as soon as the first number of the volume is issued: and after that time, no discontinuance of subscription will be permitted. Nor will a subscription be discontinued for any earlier notice, while any thing thereon remains due, unless at the option of the editor.

THE WESTERN AGRICULTURIST Is published by EDWIN R. SELBY, semi-monthly, at Ravenna, Portage County, Ohio, at One Dollar a year. *in advance.*

☞ Six copies for Five Dollars, and twelve copies for Ten Dollars.

THE RURAL LIBRARY.—A *publication of standard works entire compiled, abridged, and original, on Agriculture, Gardening, and domestic economy,* in *monthly parts,* by SAMUEL FLEET, at his Agricultural Warehouse and Seed Store, 79 Barclay-street, N. Y., at $3 per annum in advance.

THE MAINE FARMER, Is published every Tuesday morning at Two Dollars per annum if paid in advance, $2,50 if payment is delayed beyond the year.

No paper will be discontinued at any time, without payment of all arrearages, and for the volume which shall have then been commenced, unless at the pleasure of the publishers.

All money sent, or letters on business, must be directed, *postpaid,* to WM. NOYES. Publisher, Hallowell, Me. E. HOLMS, Esq. Editor.

THE GENESEE FARMER Published by LUTHER TUCKER, a Rochester, Genesee Co., N. Y., Terms. The Farmer is published every Saturday, making an annual volume of 416 papes, to which is added a Title page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

☞ The monthly Genesee Farmer is made up of selections from this paper, and published on the first of each month, forming, with Title page and Index, an annual volume of 200 pages, at the low price of Fifty Cents a year, *payable always in advance.*

THE FARMER AND GARDENER, This publication is the *successor* to the late AMERICAN FARMER, and is published at the N. E. corner of Market and Charles-sts., Baltimore, Md., at Five Dollars per annum, *payable in advance.* All subscribers who pay in advance, will be entitled to 50 cents worth of any kind of seeds, which will be delivered, or sent, to their order. E. P. ROBERTS, Esq., Editor, SANDS & NEILSON, Publishers.

THE NEW-ENGLAND FARMER, Edited by T. G. FESSENDEN, and published by JOSEPH BRECK & Co., No. 52 North Market-street, Boston, is published every Wednesday, at $3 per annum, payable at the end of the year—but those who pay within sixty days of the time of subscribing are entitled to a deduction of 50 cents.

☞ No paper will be sent to a distance without payment being made in advance.